

comprising:

(a) compounding

about one hundred parts polyvinylchloride;

about 68 parts to about 100 parts fiber per hundred parts polyvinylchloride,

and

about 1.0 to about 1.5 parts of a blowing agent per hundred parts of polymeric

resin,

to form a compounded mixture;

(b) feeding said compounded mixture into an extruder to form a molten mixture; and

(c) extruding said molten mixture through a die;

wherein the foamed composite building material formed thereby has a specific gravity of about 1.07 g/cc or less;

wherein said foamed composite building material is capable of having a screw fastener countersunk therein without predrilling.

#### **SUPPORT FOR AMENDMENTS**

Claims 24 and 25 have been canceled.

Claim 15 has been amended to include the limitations of Claims 24 and 25.

No new matter is believed to have been added by entry of this amendment. Entry and favorable reconsideration are respectfully requested.

Upon entry of this amendment Claims 15-17, 21 and 23 will now be active in this application.

## **REQUEST FOR RECONSIDERATION**

Applicants wish to thank Examiner Kuhns for his helpful and courteous discussion with Applicants' Representative on October 23, 2002. During this discussion it was suggested to include the limitations of Claims 24 and 25 in Claim 15. Claim 15 has been so amended. The combination of Cope and Ansted does not disclose or suggest the claimed method of forming a foamed composite building material which comprises polyvinylchloride, and which is capable of having a screw fastener countersunk therein without predrilling. Cope fails to disclose or suggest that predrilling may be omitted. Ansted only discloses "self-drilling" of screws to anchor polyurethane foams but not the claimed PVC containing foams.

In addition, Applicants submit herewith a Rule 132 Declaration showing that screws can be countersunk without predrilling as supported at page 2, last paragraph, of the specification and by Claim 15 as amended.

Applicants respectfully request reconsideration of the application, as amended, in view of the following remarks.

The present invention relates to a process for forming a foamed composite building material that provides a combination of unique properties, particularly for a PVC based composite. In particular, the process requires compounding a polymeric resin (such as PVC), fiber (such as wood fiber or wood flour) and a blowing agent, (and optionally an acrylic modifier), then feeding the compounded mixture into an extruder to form a molten mixture. The molten mixture is then extruded through a die to form the composite building material, with the resulting composite building material having a specific gravity of about 1.07 or less. The blowing agent is required to be present in an amount of from about 0.5 to 1.5 parts per hundred parts of polymeric resin.

Applicants have found that by feeding the required components into the extruder and

extruding the resulting molten mixture, the combination of amount of blowing agent and specific gravity of the resulting composite, provides the resulting building material with superior properties, such as the ability to countersink a screw in the product without predrilling.

Accordingly, the present invention as set forth in amended Claim 15 relates to a method of forming a foamed composite building material, comprising:

(a) compounding

about one hundred parts **polyvinylchloride**;

about 68 parts to about 100 parts fiber per hundred parts polyvinylchloride,

and

about 1.0 to about 1.5 parts of a blowing agent per hundred parts of polymeric resin,

to form a compounded mixture;

(b) feeding said compounded mixture into an extruder to form a molten mixture; and

(c) extruding said molten mixture through a die;

wherein the foamed composite building material formed thereby has a specific gravity of about 1.07 g/cc or less;

**wherein said foamed composite building material is capable of having a screw fastener countersunk therein without predrilling.**

In contrast, neither Cope alone nor the combination of Cope and Ansted disclose or suggest the claimed method of forming a foamed composite building material which comprises **polyvinylchloride and fibers**, and which is capable of having a screw fastener countersunk therein without predrilling.

Cope fails to disclose or suggest that predrilling may be omitted. Cope discloses a

composite of a polymer and wood flour for formation of an extrusion profile (Cope, col. 2, lines 11-13). The polymer comprises PVC, CPVC and polystyrene (Cope, col. 2, lines 26 and 27).

Ansted only discloses "self-drilling" of screws to anchor polyurethane foams but not the claimed PVC containing foams. Ansted discloses a means for attaching a structure to the walls of a refrigeration unit having a thin inner and outer skin with the space in between filled with foam plastic (Ansted, col. 1, lines 38-41). Metal plates contained in the foam plastic are attached by self drilling screws that will drill through the outer skin, foam plastic and plate to anchor itself in the plate (Ansted, col. 1, lines 56-60). The foam is a polyurethane foam that **does not contain any fiber** or blowing agent. Neither Cope nor Ansted disclose or suggest that such polyurethane is equivalent to the claimed building material obtained from PVC, fibers and blowing agent. Thus, the claimed method of forming a foamed composite building material which comprises **polyvinylchloride and fibers**, and which is capable of having a screw fastener countersunk therein without predrilling cannot be obvious over Cope alone or the combination of Cope and Ansted.

Furthermore, as shown in the attached Rule 132 Declaration by David Stucky, the composition resulting from the present process provides surprising and significant improvements in the ability to countersink a screw when the blowing agent and specific gravity requirements are met. Such a relationship is nowhere disclosed or suggested by Cope. Accordingly, the reference cannot render the claims obvious. Even if the Examiner maintains the position that the reference renders the claims obvious, the data provided in the copy of the Stucky Declaration adequately rebut such an asserted case of obviousness and the rejection should be withdrawn.

Finally, the composition as defined in the present method claims is essentially the

same as that allowed and issued in the parent application. As such, it's method of production is believed to be allowable also.

Therefore, the rejection of Claims 15-17, 21, 23 and 25 under 35 U.S.C. §103(a) over Cope is believed to be unsustainable as the present invention is neither anticipated nor obvious and withdrawal of this rejection is respectfully requested.

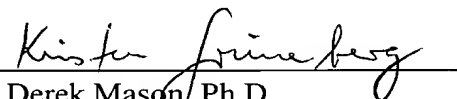
The rejection of Claim 24 under 35 U.S.C. §103(a) over Cope and Ansted is moot in view of the cancellation of this Claim.

Applicants respectfully request that the Examiner acknowledge that the references cited in the **Information Disclosure Statement**, filed in the above-identified application on **November 13, 2000**, have been considered. For the Examiner's convenience copies of Forms PTO 1449 as filed on November 13, 2000 is attached herewith.

Applicants submit that the present application is now in condition for allowance and early notice of such action is earnestly solicited.

Respectfully submitted,

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